

REMARKS

Claims 1-6 and 8 are all of the claims pending in the application.

Applicant respectfully notes that the time for responding to the Office Action of July 31, 2008, within the first extension period, expires on December 1, 2008 (November 30, 2008, falling on a Sunday). Accordingly, this Amendment is timely filed.

I. Claim Rejections under 35 U.S.C. § 103(a)

Claims 1-6 and 8 remain rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Japanese Patent Application Publication No. 2001180234 to Oura (hereinafter "Oura"). Applicant respectfully traverses this rejection and respectfully requests that the Examiner reconsider the rejection at least in view of the comments which follow.

Turning first to claim 1, the claim recites, *inter alia*, the following feature:

the steel cords in the cord reinforcing layer are such a twisted cord that a shear rigidity in a diagonal direction of a square defined by a radial line segment and a circumferential line segment in a plane of the sidewall portion at a part integrally viewing the mutually adjoining cord reinforcing layer and turnup portion of the carcass ply is a range of 300-1000 MPa at a normal state of the tire wherein an elongation of the steel cord is less than 0.5%, and a range of 1000-15000 MPa at a run-flat running of the tire wherein the elongation is not less than 0.5%.

The Examiner alleges that, given the similarity in bead constructions between the tire according to Oura and the claimed invention, a person of ordinary skill in the art at the time of the invention would have expected the tire of Oura to demonstrate a shear rigidity in accordance with the claimed invention. Applicant respectfully disagrees.

According to paragraph 0016 of the specification, preferably, with respect to SUV tires, the cord reinforcing layer is constructed with twisted cords in which a borderline of an elastic modulus between a low elastic region of not more than 50000 MPa and a high elastic region of

not less than 110000 MPa is existent at the elongation of the steel cord of not less than 0.5% but not more than 2.5%.

On the other hand, with respect to passenger car tires, the cord reinforcing layer may be constructed with twisted cords having a non-linear characteristic that the elastic modulus at the elongation of the steel cord of less than 0.5% is not more than 50000 MPa and the elastic modulus at the elongation of the steel cord of not less than 0.5% is not less than 110000 MPa (*see* paragraph 0017 of the specification).

Furthermore, according to paragraph 0018 of the specification, the elongation of the cord at the normal state of the tire in the SUV series vehicle generally tends to be larger than that in the tire for the passenger car, so that the limit elongation at the low elastic modulus region is within a range of 0.5-2.5% wider than that for the passenger car.

Thus, different cords having different properties are used to form the cord reinforcing layer depending on the desired shear rigidities at various elongations of the steel cords. Furthermore, the shear rigidity is not determined solely by the arrangement of the steel cords but rather is also influenced by the properties of the cords themselves.

The Examiner points to paragraph 007 of the specification and alleges that the specification discloses that shear rigidity is directly related to the relationship between cord diameter and cord spacing and thus the claimed rigidity would be expected to be present in the tire of Oura (*see* page 3 of the Office Action). Applicant respectfully disagrees.

The specification does not indicate that the relationship between cord diameter and cord spacing is the sole factor determining rigidity. This is clear, for example, from comparative tire 4 shown in Table 2 of the specification. Comparative tire 4 satisfies the relationship between the interval between the steel cords and the diameter of the cord defined in

claim 1, however, it does not satisfy the shear rigidity of claim 1, and accordingly, the index of run-flat durability is low for comparative tire 4.

Furthermore, the other factors alleged by the Examiner (including the inclination angle of the steel cords and the positioning of the cords) are not the only factors determining shear rigidity. As discussed above, the elastic modulus properties of the cords can vary and also affect the shear rigidity.

For these reasons, Applicant respectfully disagrees that the claimed rigidity would be expected to be present in the tire of Oura because Oura is silent with respect to the elastic modulus properties of the cords at different elongations.

At least for this reason, Applicant respectfully submits that claim 1 is patentable over Oura. Applicant respectfully submits that claims 2-6 and 8 are patentable over Oura at least by virtue of their dependency on claim 1.

II. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly invited to contact the undersigned attorney at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

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